

SYSTEMS AND METHODS FOR INITIAL SAMPLING IN MULTI-OBJECTIVE  
PORTFOLIO ANALYSISABSTRACT OF THE DISCLOSURE

The systems and methods of the invention are directed to portfolio optimization and related techniques. For example, the invention provides a method for multi-objective portfolio optimization for use in investment decisions based on competing objectives and a plurality of constraints constituting a portfolio problem, the method comprising: generating an initial population of solutions of portfolio allocations, the generating the initial population of solutions of portfolio allocations including systematically generating the initial population of solutions to substantially cover the space defined by the competing objectives and the plurality of constraints; and generating an efficient frontier in the space based on the initial population, the efficient frontier for use in investment decisioning.